

Title (en)
Transmission code having local parity

Title (de)
Kodeübertragung mit lokaler Parität

Title (fr)
Transmission de code à parité locale

Publication
EP 0725486 B1 20040714 (EN)

Application
EP 96100861 A 19960123

Priority
US 53215295 A 19950201

Abstract (en)
[origin: EP0725486A2] A method and apparatus are described for coding a frame of N-bit bytes into a frame of coded M-bit bytes wherein $M > N > 0$ and wherein said frame has a frame boundary including the steps of storing a frame of M-bit bytes; providing a code containing a set of M-bit bytes which is a subset of all possible M-bit bytes; for each of the 2^N possible N-bit bytes there is a corresponding member in said set; each of said members of said code has a sequence of bits having a binary state selected from one of three values such that if the state of one of the bits is changed, a resulting M-bit byte is not a member of the code; one of the members of the code is a comma used to identify the frame boundary; the comma has a sequence of bits having a binary state selected from a first and second value such that the bit sequence of the comma is confined to one of said members of the code and the bit sequence of the comma does not occur across a boundary between any combination of any other members of the code; assigning to each of said N-bit bytes in said frame said corresponding member from said code to form a coded frame corresponding to said frame; and storing said coded frame. <IMAGE>

IPC 1-7
H03M 13/00; **H03M 5/14**

IPC 8 full level
H03M 5/14 (2006.01); **H03M 13/09** (2006.01)

CPC (source: EP US)
H03M 5/145 (2013.01 - EP US); **H03M 13/095** (2013.01 - EP US)

Citation (examination)
• SCHOUHAMMER; IMMINK; BEENKER: "Binary Transmission Codes with Higher Order Spectral Zeroes at Zero Frequency", IEEE TRANSACTIONS ON INFORMATION THEORY, vol. IT-33, no. 3, May 1987 (1987-05-01), pages 452 - 454, XP002218921
• FERREIRA H.C. ET AL: "Hamming Distance Preserving Mappings and Trellis Codes with Constrained Binary Symbols", IEEE TRANSACTIONS ON INFORMATION THEORY, vol. 35, no. 5, September 1989 (1989-09-01), pages 1009 - 1103, XP000100947, DOI: doi:10.1109/18.42229

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EP1074120A4; NL2019153A; EP4024796A4; EP4024797A4; US11962329B2

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DE FR GB

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EP 0725486 A2 19960807; **EP 0725486 A3 19980520**; **EP 0725486 B1 20040714**; DE 69632879 D1 20040819; DE 69632879 T2 20050825; US 5699062 A 19971216

DOCDB simple family (application)
EP 96100861 A 19960123; DE 69632879 T 19960123; US 53215295 A 19950201